

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP00/00264

A. CLASSIFICATION OF SUBJECT MATTER
 Int.Cl⁷ G11B19/00, G06F1/26
 H02J1/00, 307

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 Int.Cl⁷ G11B19/00-19/02, G06F1/26-32
 H02J1/00, 306-308

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 Kokai Jitsuyo Shinan Koho 1971-2000 Jitsuyo Shinan Toroku Koho 1996-2000
 Jitsuyo Shinan Koho 1926-1996 Toroku Jitsuyo Shinan Koho 1994-2000

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| X | JP, 10-27411, A (Matsushita Electric Ind. Co., Ltd.), 27 January, 1998 (27.01.98), | 1-4, 7-12, 14 |
| Y | Par. Nos. 0017 to 0024; Figs. 1, 2 (Family: none) | 5, 6, 13 |
| X | JP, 10-27412, A (NEC Gunma Ltd.), 27 January, 1998 (27.01.98), | 1-4, 7-12, 14 |
| Y | Full text; Fig. 1 (Family: none) | 5, 6, 13 |
| E, X | JP, 2000-99211, A (Matsushita Electric Ind. Co., Ltd.), 07 April, 2000 (07.04.00), | 1-4, 7-12, 14 |
| A | Par. Nos. 0010 to 0025; Figs. 1, 2 (Family: none) | 5, 6, 13 |
| Y | JP, 7-153173, A (Funai Techno. Syst. K.K.), 16 June, 1995 (16.06.95), 0014-0017, Fig. 2 (Family: none) | 5, 6, 13 |
| Y | JP, 8-212679, A (Hitachi, Ltd.), 20 August, 1996 (20.08.96), Par. Nos. 0009 to 0011; Figs. 1, 2 (Family: none) | 5, 6, 13 |
| Y | JP, 10-92085, A (Samsung Electron Co., Ltd.), 10 April, 1998 (10.04.98), | 5, 6, 13 |

 Further documents are listed in the continuation of Box C. See patent family annex.

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| * Special categories of cited documents: | |
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| "P" document published prior to the international filing date but later than the priority date claimed | |

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| Date of the actual completion of the international search 20 April, 2000 (20.04.00) | Date of mailing of the international search report 02 May, 2000 (02.05.00) |
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| Name and mailing address of the ISA/ Japanese Patent Office | Authorized officer |
| Facsimile No. | Telephone No. |

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PCT/JP00/00264

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| | Par. Nos. 0005 to 0007, 0021 to 0025; Fig. 3 (Family: none) | |
| Y | JP, 6-231527, A (Toshiba Corporation), 19 August, 1994 (19.08.94), Full text; all drawings (Family: none) | 5,6,13 |
| A | JP, 61-288725, A (Oki Electric Industry Co., Ltd.), 18 December, 1986 (18.12.86) (Family: none) | 1-14 |
| A | JP, 7-194844, A (AIWA CO., LTD.), 01 August, 1995 (01.08.95) (Family: none) | 1-14 |
| A | JP, 7-288874, A (Matsushita Electric Ind. Co., Ltd.), 31 October, 1995 (31.10.95) (Family: none) | 1-14 |
| A | JP, 10-241259, A (Fujitsu Limited), 11 September, 1998 (11.09.98) (Family: none) | 1-14 |
| A | JP, 2000-90549, A (Sony Corporation), 31 March, 2000 (31.03.00) (Family: none) | 1-14 |